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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,014	12/30/2003	Sun-Chueh Kao	2002U035.US	6457

EXAMINER
RABAGO, ROBERTO

ART UNIT	PAPER NUMBER
1713	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/748,014	Applicant(s) KAO, SUN-CHUEH	
	Examiner Roberto Rábago	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38-59 and 61-66 is/are rejected.
- 7) ☒ Claim(s) 60 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 38-44, 48-55 and 62-66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) The phrase "methylalumoxane-activatable compound" is not sufficiently described in the specification to allow the ordinary skilled worker to determine the metes bounds of the claim. The specification provides numerous examples of catalyst compounds for olefin polymerization as within the stated scope of a methylalumoxane-activatable compound, and the claims were previously examined under the assumption that a methylalumoxane-activatable compound is in fact a polymerization catalyst compound which is rendered catalytically active for olefin polymerization upon contact with methylalumoxane. However, further close reading of the specification reveals no definition of what a methylalumoxane-activatable compound actually is; specifically, there no description of any required structure or function to this component, and there is no definition of what kind of activity is required for the concept of "activatable." The intended meaning of a component which has neither required structure nor required function cannot be determined.

Applicant's arguments filed 6/22/2007 have been fully considered but they are not persuasive. Applicants' argument is phrased solely in the context of activation of a transition metal catalyst for addition polymerization. However, the claims are not limited

thereto, and the specification does not define the activator as such. While exemplary embodiments are discussed in the specification, limitations from the specification are not read into the claims.

Claim Rejections - 35 USC § 102

2. Claims 38-50, 52-59 and 61-66 are rejected under 35 U.S.C. 102(b) as being anticipated by Reddy et al. (US 6,214,949) for the reasons set forth in item 5 of the Office action mailed 11/2/2006 and the Advisory action mailed 12/21/2006 and item 3 of the Office action mailed 3/23/2007.

Applicant's arguments filed 6/22/2007 have been fully considered but they are not persuasive. Applicants persist in arguing that insufficient basis exists for concluding that in an intimate mixture of two metallocenes in solution and a supported solid ZN catalyst, at least a non-zero amount of at least one metallocene will exist on the solid surface. The basis of the argument is substantially the same as that set forth previously, which has been addressed at length in the prior Office action. Applicants are again reminded of the exceedingly broad scope of their claims, including all embodiments wherein any amount of any two catalyst materials active for any reaction to any degree under any condition exists on any support, further contacted with any aluminoxane activatable compound. The position that the reference support surface will be molecularly devoid of either of the two metallocenes is not reasonable, particularly in view of the fact that highly active support materials such as those described in the reference are known to have affinity for metallocenes. The amount resident on the

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surface is entirely irrelevant; all that is required is that a non-zero amount be present at any time during the entire period during which these materials are in contact

4. Claim 60 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

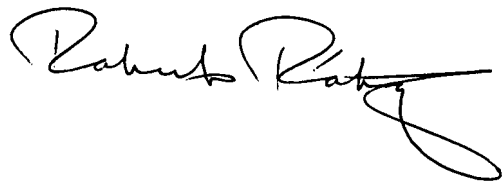
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roberto Rábago
Primary Examiner
Art Unit 1713

RR
September 17, 2007

A handwritten signature in black ink, appearing to read 'Roberto Rábago', with a stylized flourish at the end.